

REMARKS/ARGUMENTS

The Examiner is thanked for the courtesy of the telephone interview on January 30, 2009 with the lead inventor and the undersigned attorney, and Bart Sullivan of PIXAR, assignee of the subject patent application. Although no explicit agreement was reached on the allowability of claims, it is believed that proposed amendments to claim 1 and by extension claim 12 served to clarify the scope of the invention to the satisfaction of the Examiner. No new issues have been raised. However, to expedite the processing of the present application, this response has been submitted with a Request for Continued Examination.

Claims 1-6, 8-21, 23, 24, 26, 27, 29, 31-33 and 35 stand finally rejected.

Claims 1, 3-8, 12-14 and 23 stand rejected under 35 U.S.C. §102(b) as anticipated by Ramsay et al. U.S. Pat. No. 4,757,374.

Claims 2, 9, 10, and 15-21 as well as claims 31 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ramsay in view of Treiber U.S. Pat. No. 6,359,676 and in light of official notice of well-known knowledge.

Claim 11 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ramsay in view of Hirata US 2002/0167701.

Claims 22, 24, 25, 27-30 and 33-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ramsay in view of Gould et al. U.S. Pat. No. 3,824,336.

Claim 26 stands rejected under 35 U.S.C. §103(a) over Ramsay in view of Foug.

Claims 31 and 32 stand further rejected under 35 U.S.C. §103(a) as being unpatentable over Ramsay in view of Gould and Treiber.

The Applicants respectfully traverse the outstanding final rejection for the following reasons.

The Applicants submit that the Examiner has misunderstood the intended scope of the claims in the course of citation of the Ramsay reference.

The Applicants submit that the Examiner has misunderstood the intended scope of the claims in the course of citation of the Treiber reference.

The Applicants submit that the Examiner has misunderstood the intended scope of the claims in the course of citation of the Hirata reference.

The Applicants submit that the Examiner has misunderstood the intended scope of the claims in the course of citation of the Gould reference .

The Examiner has combined references where there is little or no basis or suggestion in the references that would point to such a combination.

Respecting claims 1, 3-8, 12-14 and 23, the Examiner has characterized Ramsay as representing an apparatus for registering images from a source digital display device to individual frames of continuous movie film media with resolution and contrast greater than an inherent capability of a source of display. The Applicants respectfully dispute such characterization and submit that proper understanding of the Ramsay reference renders moot both the 102 and 103 rejections. The Applicants will therefore focus on the Ramsay reference.

The Ramsay reference is a description of device for capturing, from individual still diapositive slides and/or still frames projected onto a screen for registration as still images of a motion video on moving film and evidently also on videotape. It is not a device for composition, correction and/or reproduction onto movie film from a source digital display device.

The Examiner has cited Ramsay in various aspects for disclosing an apparatus for selectively and repeatedly exposing individual frames of film media. It is submitted that Ramsay teaches just the opposite: It is intended for recording images of single frames from a collection of unrelated slides onto successive frames movie film media, i.e., slides onto movie film in motion and/or videotape in motion. By contrast, the present invention is directed to making multiple exposures onto the same individual single frame of recordable film media to construct each frame from various closely related source images presented by the source digital flat panel display. To make it clearer that Ramsay does not address this intended claim scope, claim 1 has been amended to reflect these distinctions. The Applicants therefore submit that the citation of the Ramsay reference is now rendered moot as to the intended scope of the present claims.

The Examiner has cited Ramsay in various aspects for disclosing an electronically addressable flat panel display device as element 45 of Figure 11. The Applicants respectfully

dispute this characterization of the element that appears to be a projection screen shown in Figure 11. What the Examiner has referenced as “an electronically addressable flat panel display device” is a light dispersing glass image plate. The term “flat panel display” has come to mean a specific type of structure in the art of interest. There is no source flat panel display device associated with the Ramsay reference. An electronically addressable flat panel display is, and in the art means, a particular type of video display element and not merely to anything that is flat on which an image could be viewed. To make it clear that there is nothing in common between the claimed invention and that so-called flat panel display, claims 1 and 12 have now been amended to recite that the flat panel display is driven directly from a computer. Since the flat panel display is a specific type of element, it has inherent characteristics not known or contemplated by the Ramsay prior art, and yet it establishes grounds for a reasonable limitation on the claimed invention. Therefore, the present invention is not in any way to be confused with a diapositive slide image projection with all of its optical and illumination aberrations.

The Examiner has cited Ramsay in various aspects for disclosing an alignment mechanism, referring to a pair of rollaway carts on adjustable legs and connected by rods coupled by slide sleeves as representative of an optical alignment unit. This citation does not suggest the sort of accurate alignment contemplated by the present invention. To make the distinction clear, claim 1 and 12 have been amended to recite that the alignment unit is of the type that provides that registration of each color component of each pixel is positionally repeatable. The accuracy of registration is important since the color components of each single pixel at the source are projected on top of one other in exact registration at the target, unlike a color digital display, wherein the color elements of each single pixel are disposed adjacent one another. Thus, the exposed image can be produced with resolution and contrast greater than inherent capabilities of the digital flat panel display. Such accuracy and resolution is not contemplated in the Ramsay disclosure or in any secondary reference.

Regarding claim 8 respecting an (additional) illumination source, the illumination source herein contemplated is in addition to that provided as part of the flat panel display. This illumination source is of specific sorts not disclosed or suggested by the Ramsay reference. There is no teaching of a DLP source, of an LED source and of a strobe source. The cited

passages in Ramsay either make no mention of light source (column 4, lines 62-67) or merely reference it in passing as being of a “suitable” type (column 7, lines 53-57), without any indication that illumination may be supplemental to other sources of illumination.

Regarding to claims 2, 9 10 and 15-21, the Ramsay reference is likewise deficient for the foregoing reasons. Specific types of flat panel displays have been recited in Treiber, which is part of an imaging device for printing to paper. The citation of Treiber for disclosing various types of flat panel displays and allegedly disclosing multiple sources of illumination does not overcome the inherent deficiencies of Ramsay as an inappropriate primary reference.

Regarding claim 11, the Ramsay reference is likewise deficient for the foregoing reasons, and the cited Hirati reference does not appear to correct any of the deficiencies of Ramsay in such a way that one of ordinary skill in the art would look to combine the references and achieve the claimed invention. Claim 11 recites a very specific embodiment of illumination for each of the source images for the combined frame. Since Ramsay does not teach of combining source images, the citation of Hirati is inappropriate.

Regarding claims 22, 24, 25, 27-30 and 33-35, the Ramsay reference is likewise deficient for the previously recited reasons, and neither the Hirati reference nor the Gould reference serves to correct or mitigate any of the deficiencies of Ramsay in such a way that one of ordinary skill in the art would look to combine the references and achieve the claimed invention. The Ramsay reference has been misapplied as previously explained. The Hirati reference merely recites that there are various types of color LEDs. The Applicant does not dispute that. It is the combination that is claimed. The Gould reference is an early film-to-videotape editing system wherein shutters are employed to switch between sources for delivering different and typically sequential images to a film camera that evidently employs a video capture module rather than a film recording medium. By contrast, the present invention provides that film, not some other medium, is involved in the exposure of its single frames to a plurality of related images, that is, components of a final image, with extreme (pixel-level) accuracy and in a manner that a single source image cannot project.

Regarding claim 26, the combination of Ramsay and Fount do not rise to the level of the present invention as claimed. Ramsay fails as a reference as previously explained.

The concept of spatial dithering in Foug serves no purpose in a Ramsay system. In fact, the invocation of spatial dithering in connection with pixel accurate registration of a plurality of component images would appear on its face to be nonobvious. Therefore one of skill in the art would not look to the combination to achieve the claimed invention.

As to claims 31 and 32, for reasons previously stated with respect to Ramsay, Gould and Treiber, the Applicants contend that the references individually and collectively do not render the claimed invention obvious. Treiber is particularly deficient as a citation, as it simply does not even teach the intentional variable illumination of image that varies by location. The cited passage (Col. 3 line 54-Col. 4, line2) relates merely to modulation of the image irrespective of the location of the projection. Thus, the rejection fails to satisfy the prima facie requirements of the claim language.

By way of perspective and summary, this invention contributes commercially valuable new processes for producing theater-quality movie film from digital, computer-generated source material. It overcomes some of the significant problems associated with film production from digital image sources. By contrast, the cited art is unrelated to this problem.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

Respectfully submitted,



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